



I hereby certify that this correspondence is being deposited with the U.S. Postal Service with sufficient postage as First Class Mail, in an envelope addressed to: Commissioner for Patents, Washington, DC 20231, on the date shown below.

Dated: 9/27/02

Signature: *Patricia McKenney*
(Patricia McKenney)

Docket No.: JHUC-P04-010
(PATENT)

RECEIVED
OCT 07 2002
TECH CENTER 1600/2900

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Patent Application of:
Beachy et al.

Application No.: 09/708964

Group Art Unit: 1616

Filed: November 8, 2000

Examiner: B. Badio

For: INHIBITORS OF HEDGEHOG SIGNALING
PATHWAYS, COMPOSITIONS AND USES
RELATED THERETO

SUBMISSION OF FORMAL DRAWINGS

Commissioner for Patents
Washington, DC 20231

Dear Sir:

Submitted herewith is one set (sixteen sheets, fifteen figures) of formal drawings for filing in the above-identified patent application. Kindly substitute the enclosed formal drawings for the informal drawings submitted with the originally filed application.

Applicant believes no fee is due with this response. However, if a fee is due, please charge our Deposit Account No. 18-1945, under Order No. JHUC-P04-010 from which the undersigned is authorized to draw.

Dated: September 27, 2002

Respectfully submitted,

By *David P. Halstead*

David P. Halstead, Ph.D.
Registration No.: 44,735

ROPES & GRAY
One International Place
Boston, Massachusetts 02110-2624
(617) 951-7000
(617) 951-7050 (Fax)
Agent for Applicant

1/16

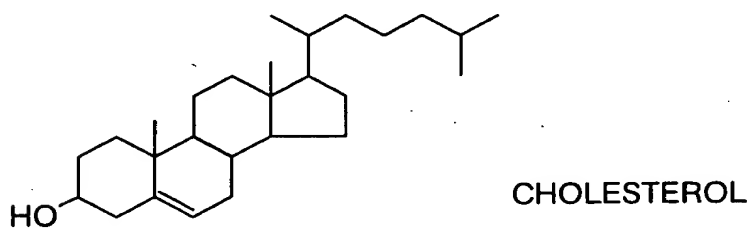
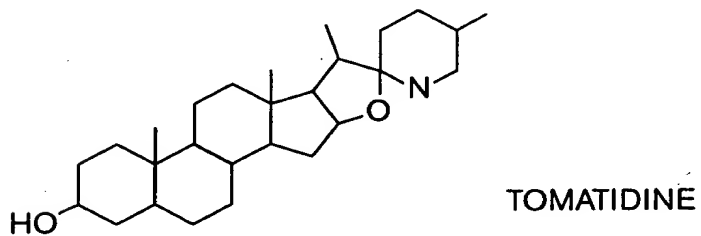
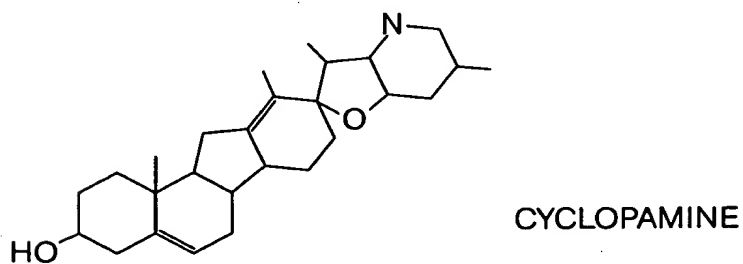
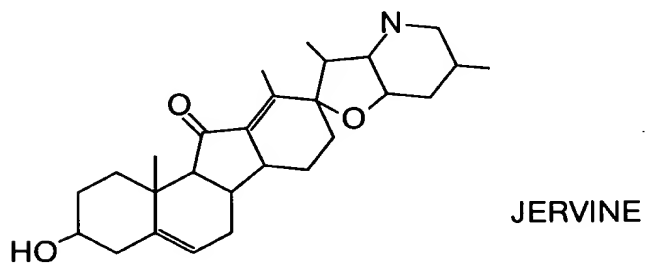
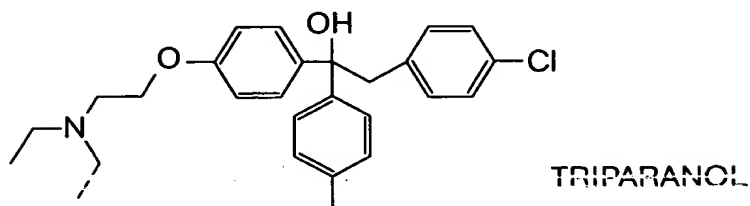
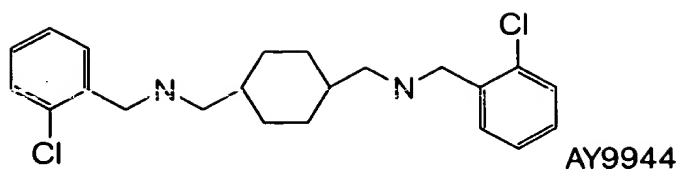


Fig. 1

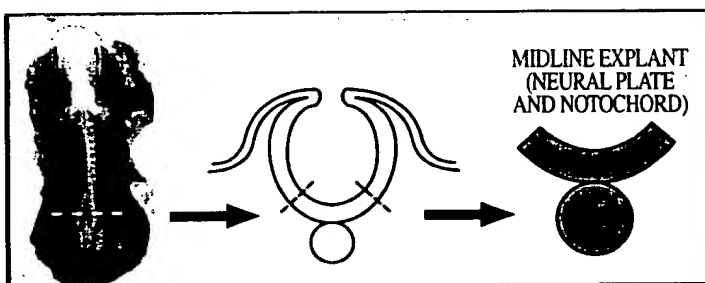


Fig. 3A



Fig. 3B



Fig. 3C

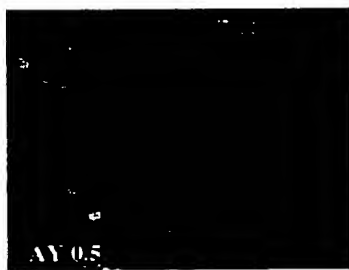


Fig. 3D



Fig. 3E

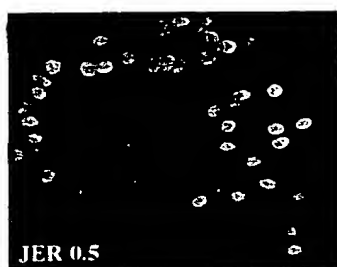


Fig. 3F

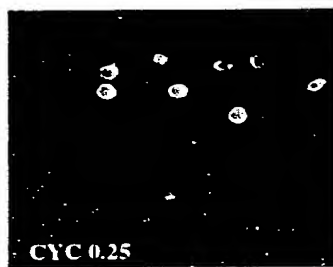


Fig. 3G



Fig. 3H



Fig. 3I



Fig. 3J



Fig. 3K



4/16

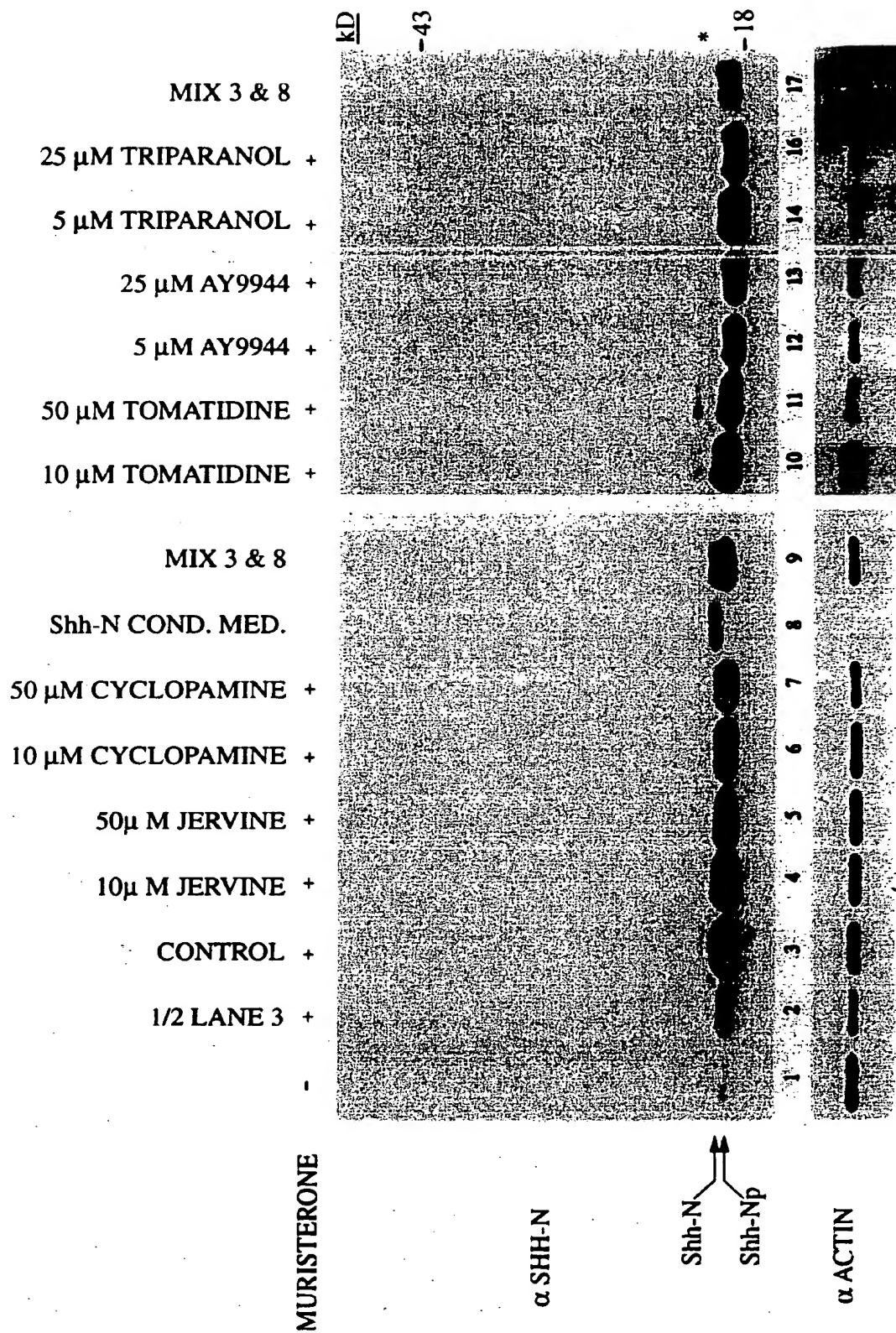


Fig. 4



5/16

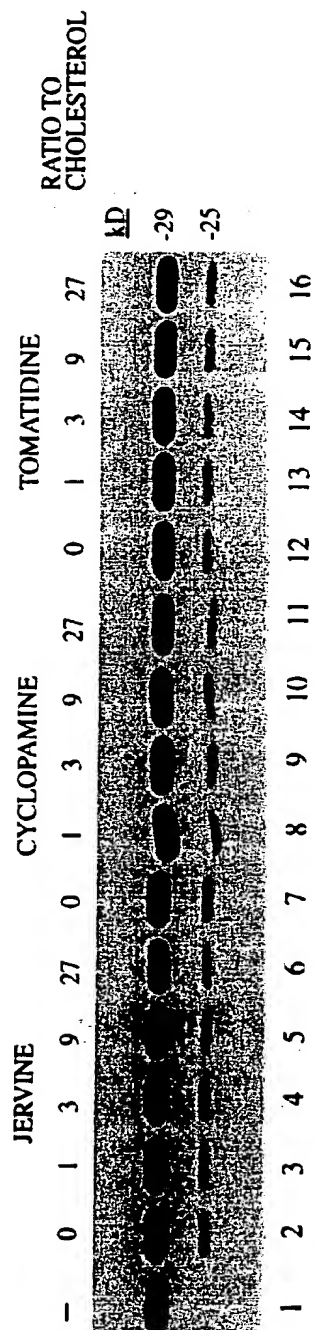


Fig. 5A

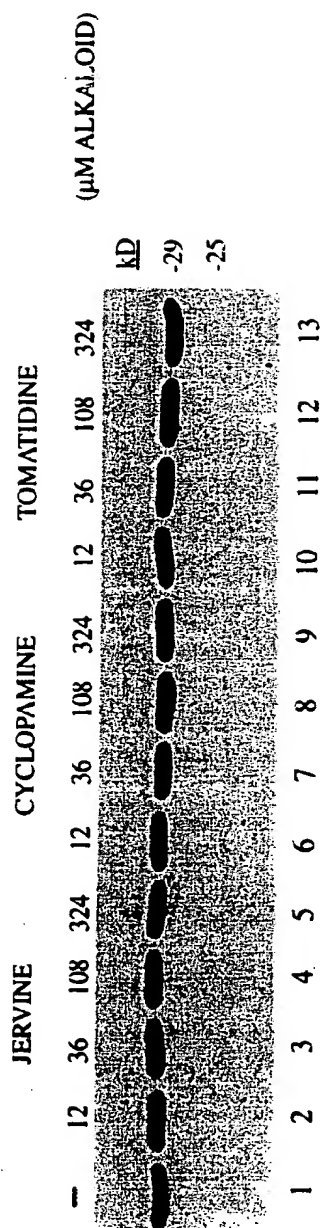


Fig. 5B



6/16

RECEIVED
OCT 07 2002
TECH CENTER 1600/2900

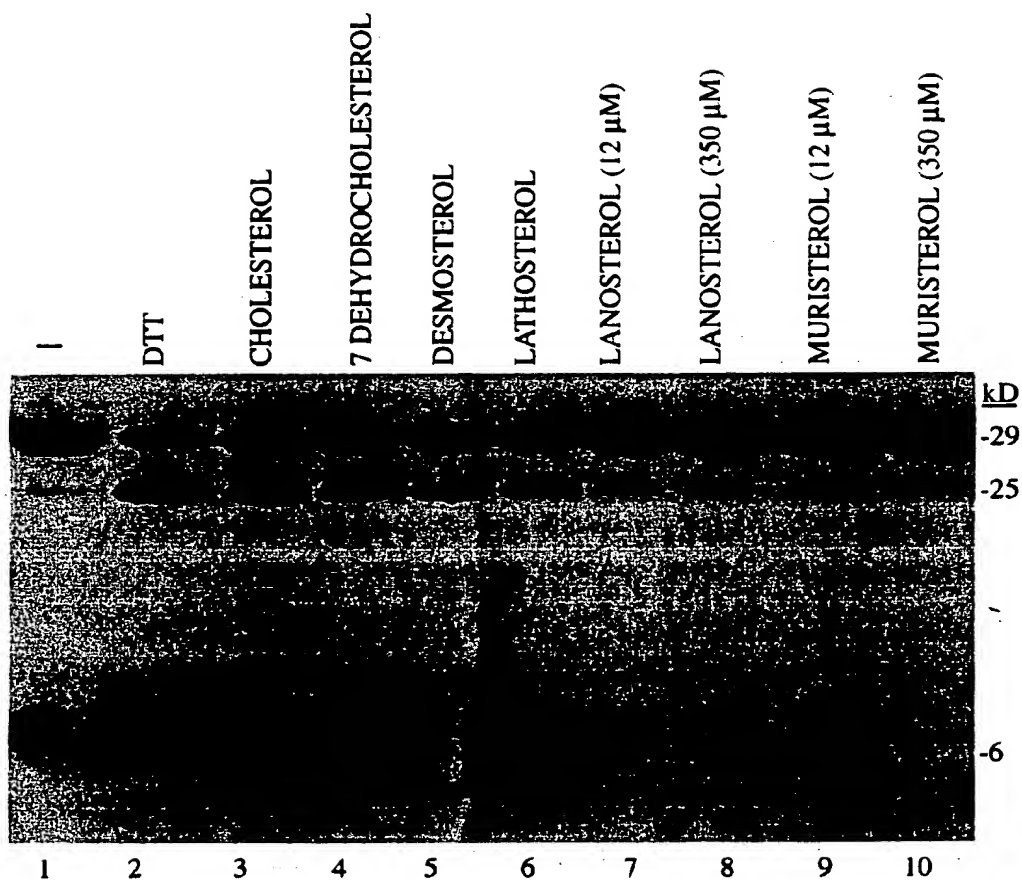


Fig. 5C

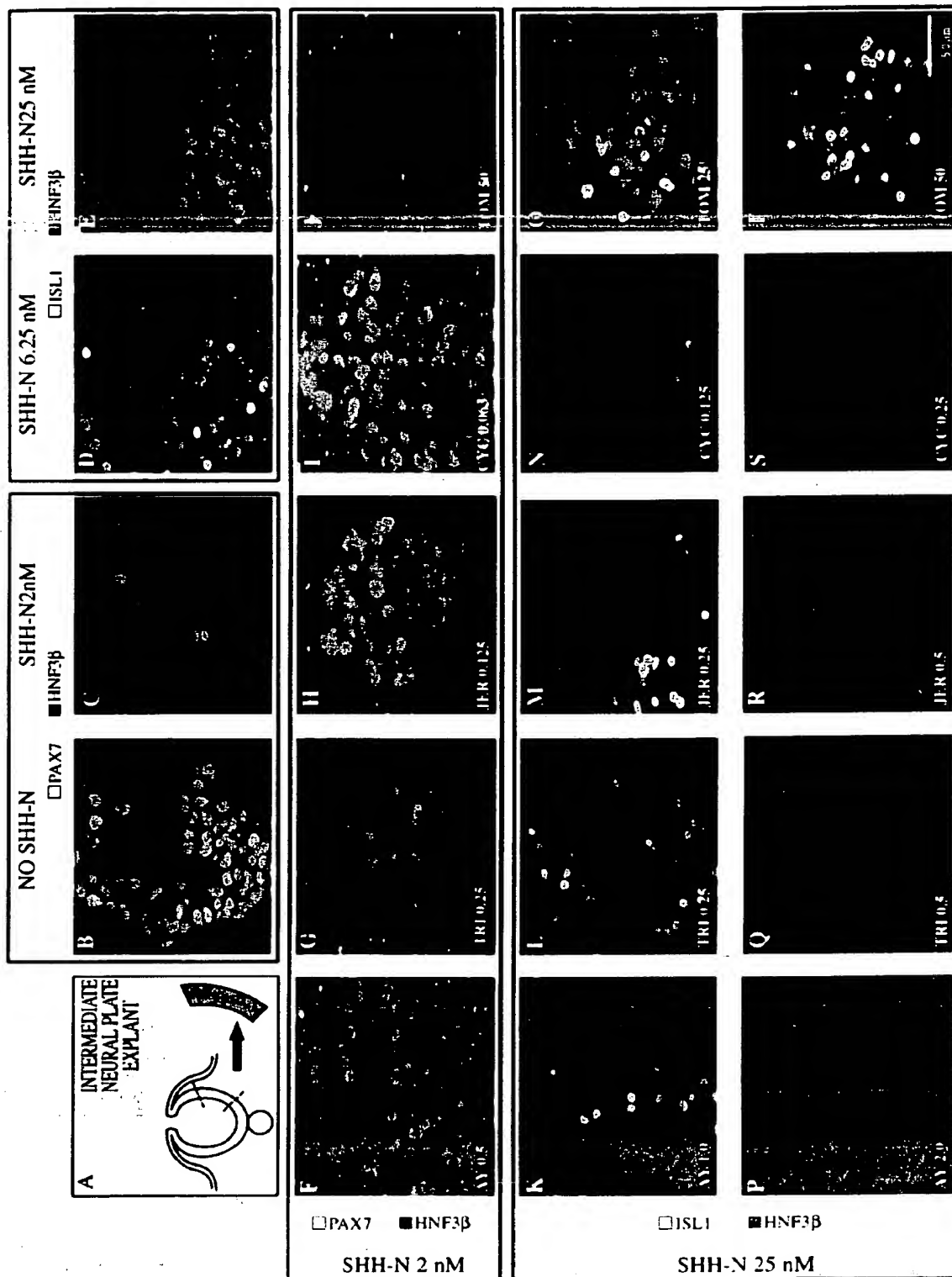


Fig. 6 (A-T)



8/16

RECEIVED
OCT 07 2002
TECH CENTER 1600/2900

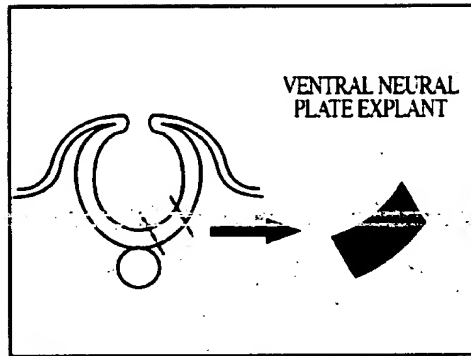


Fig. 7A



Fig. 7B



Fig. 7C

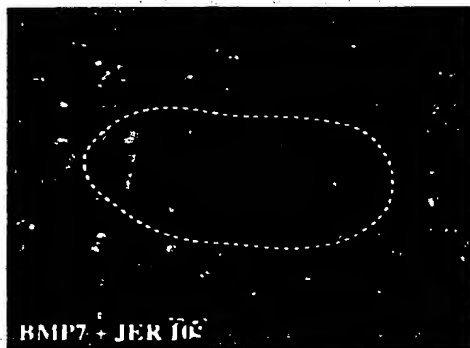


Fig. 7D

9/16

Control



Fig. 8A

Shh -/-



Fig. 8B

Control

Gli1



Fig. 8C

Shh -/-

Gli1



Fig. 8D

Control

Ptc1



Fig. 8E

Shh -/-

Ptc1



Fig. 8F

Control

BMP-4



Fig. 8G

Shh -/-

BMP-4



Fig. 8H



10/16

RECEIVED
OCT 07 2002
TECH CENTER 1600/2900

Control



Fig. 9A

Shh -/-

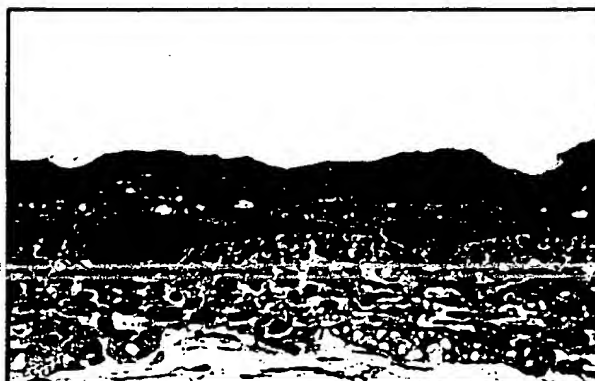


Fig. 9B

Control



Fig. 9C

Shh -/-

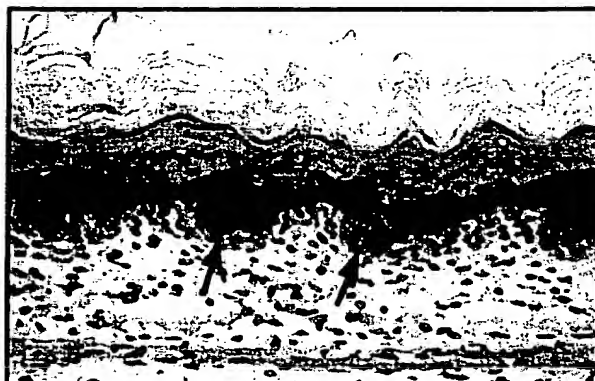


Fig. 9D

Control



Fig. 9E

Shh -/-



Fig. 9F



11/16

RECEIVED
OCT 07 2002
TECH CENTER 1600/2300



Fig. 10A

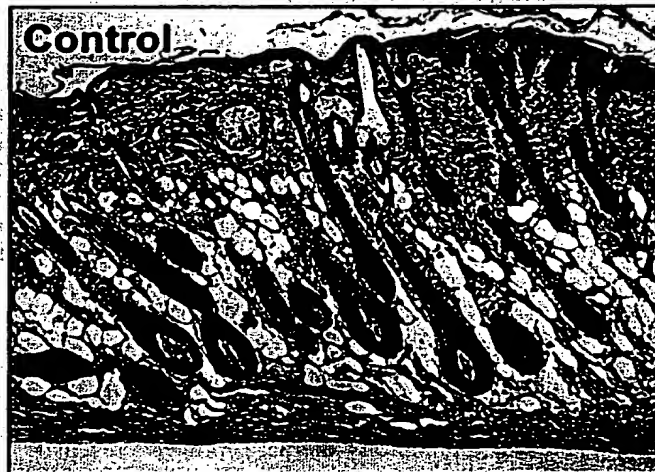


Fig. 10B



Fig. 10C



12/16

RECEIVED
OCT 07 2002
TECH CENTER 1000/2000



Fig. 10D

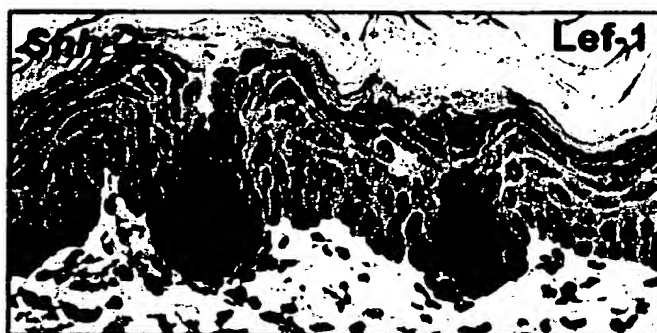


Fig. 10E

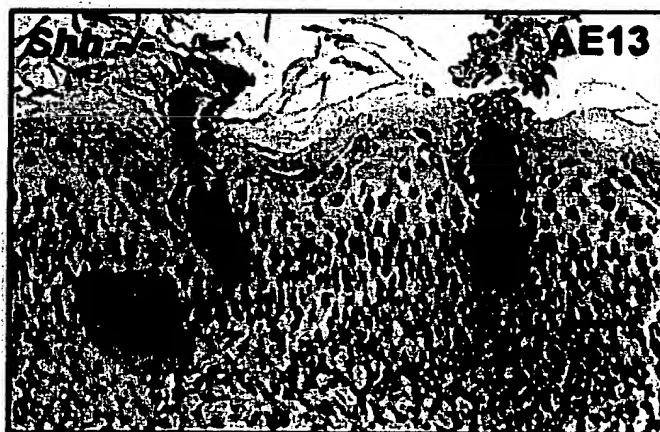
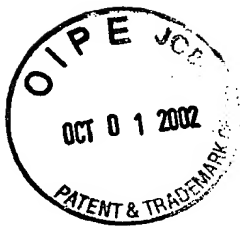


Fig. 10F



13/16

RECEIVED
OCT 0 7 2002
TECH CENTER 1030/2000

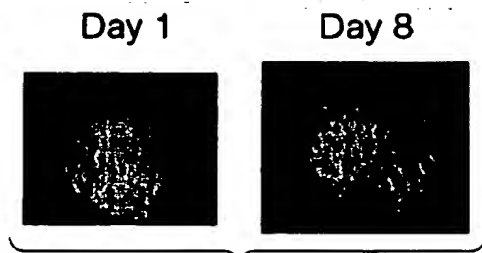


Fig. 11A

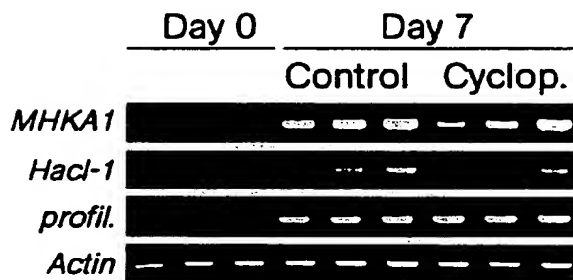
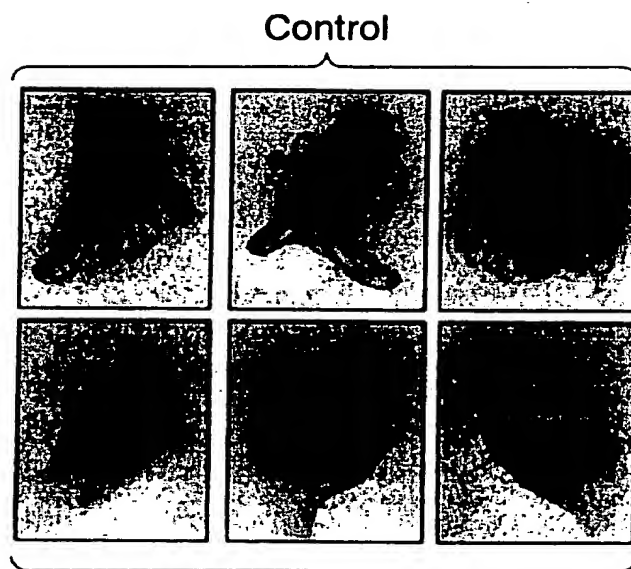


Fig. 11B



Cyclopamine

Fig. 11C



14/16

RECEIVED
OCT 07 2002
TECH CENTER 1600/2900

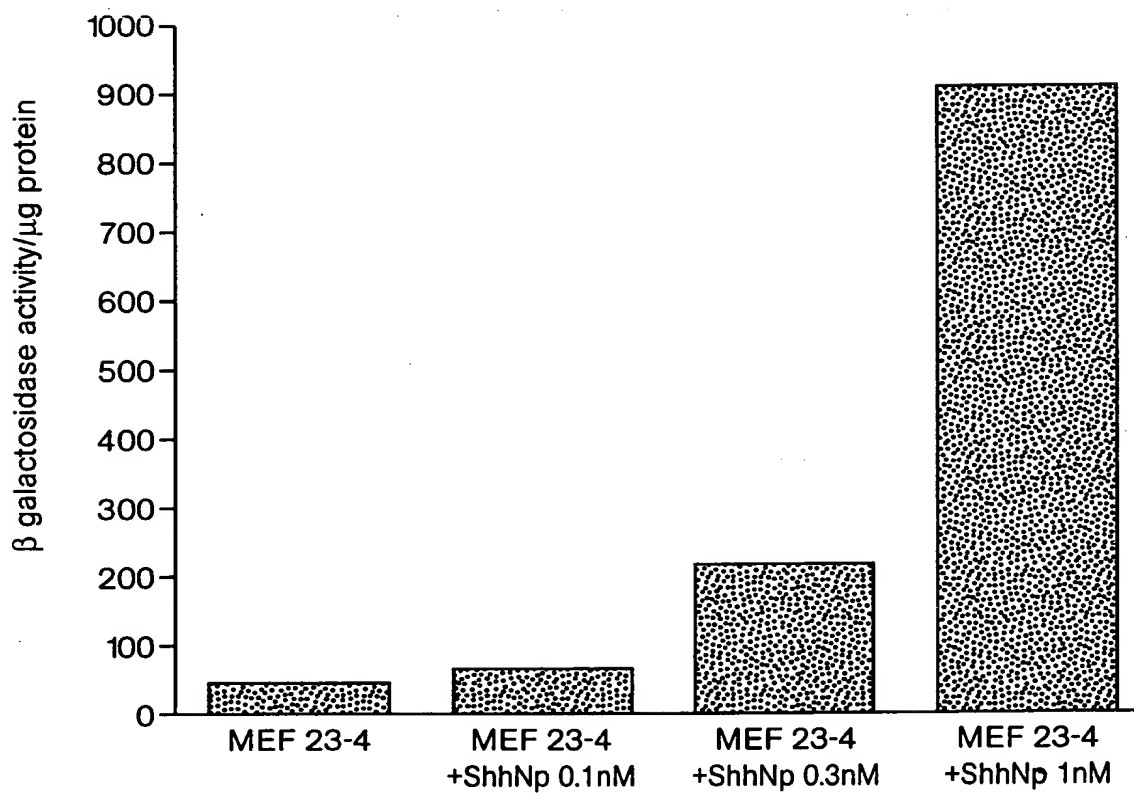


Fig. 12



15/16

RECEIVED
OCT 07 2002
TECH CENTER 1600/2500

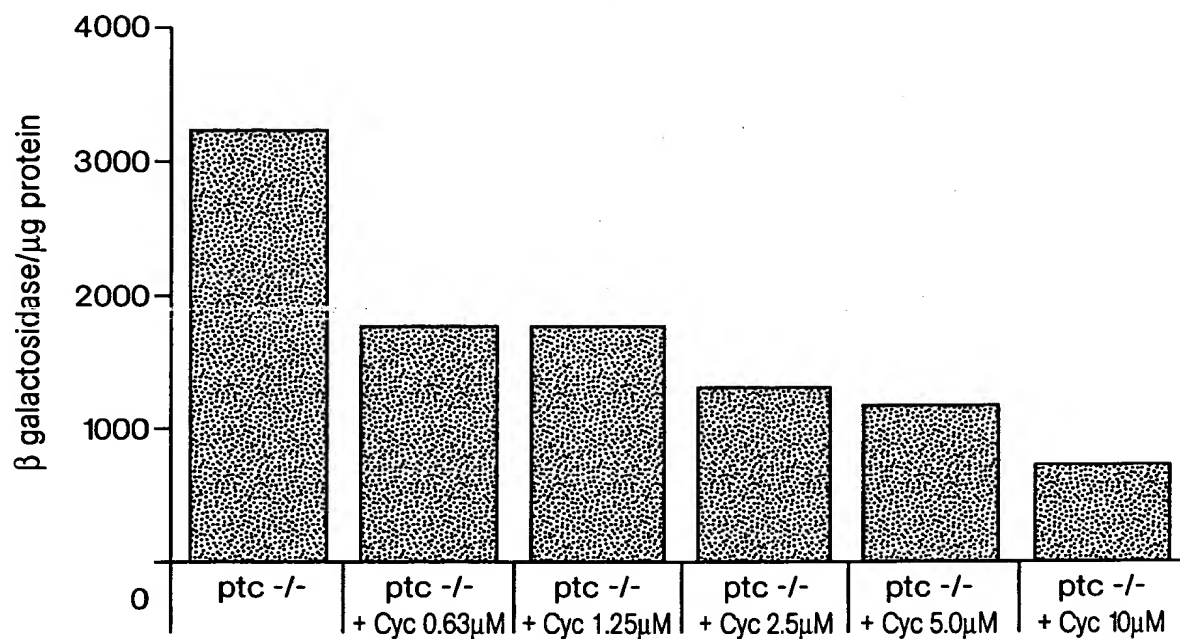


Fig. 13

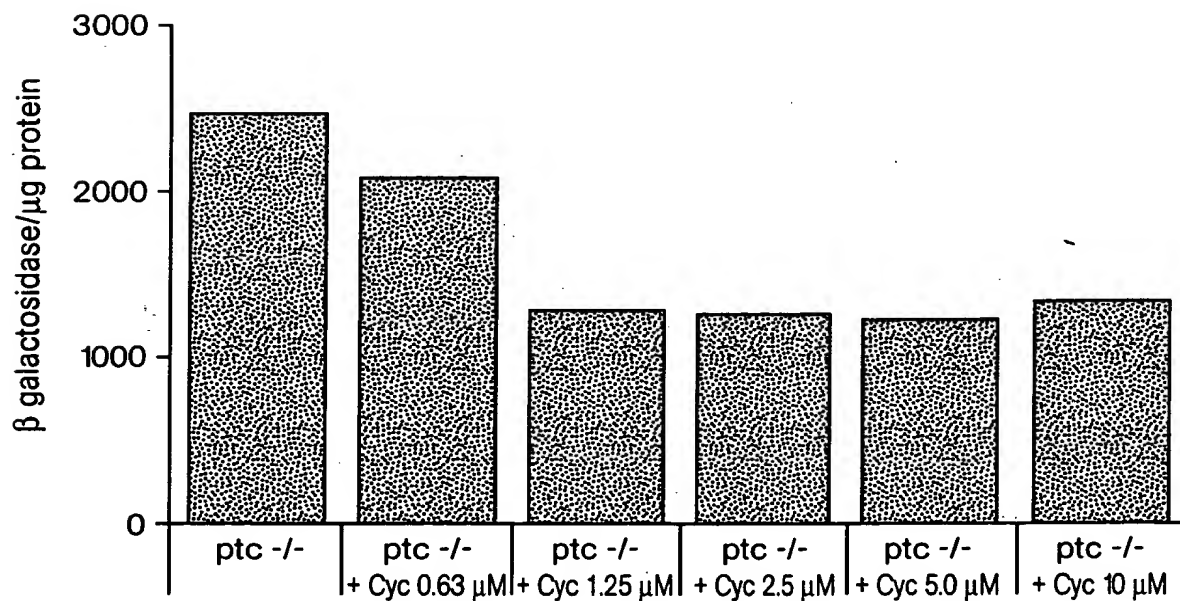


Fig. 14



16/16

RECEIVED
OCT 07 2002
TECH CENTER 1600/2900

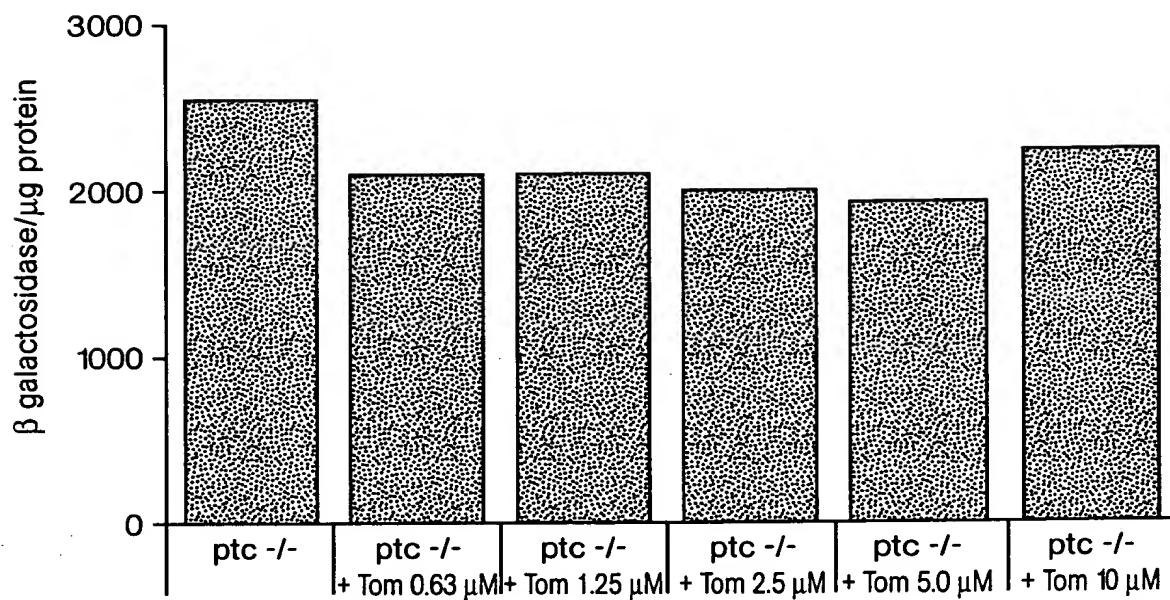


Fig. 15